

Practice

For use with pages 149–153

Tell whether the given number is a solution of $2(3x + 1) \geq 7x + 4$.

1. -1

2. -2

3. -10

4. 0

Match the inequality with the graph of its solution.

5. $3(4x - 1) \leq 10x + 25$



6. $2(14 - 3x) \leq -4x$



7. $-7x + 17 \geq 115$

8. $\frac{x + 4}{5} \geq -2$

Solve the inequality. Graph your solution.

9. $-6x - 15 > 57$



10. $22 > \frac{x}{-12} + 4$



11. $-3(2 - x) \leq 2x - 9$



12. $6(5 - 2x) < 5x + 13$



13. $\frac{3x - 1}{4} < 8$



14. $\frac{2x + 5}{3} \geq -7$



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15. $\frac{-x - 11}{3} \leq 21$



16. $-8 < \frac{5x + 4}{7}$



17. $4x + 22 > -2(14 + 3x)$



18. $-4(x + 10) \geq -7x + 65$



19. $8(3x - 19) < 15x + 73$



20. $74 < \frac{-17x + 30}{5}$



21. $\frac{25x - 41}{13} \leq 18$



22. $12(2x - 13) > 117 - 15x$

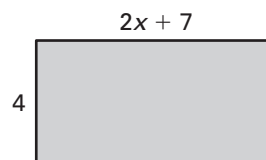


23. $29x - 515 \leq -14(8 - 3x)$



24. The golf course you play at charges \$22 per round of golf. You can either rent golf clubs at the course for \$8 or you can buy your own set of clubs for \$160. Write and solve an inequality to find the number of rounds of golf you need to play in order for the cost of purchasing clubs to be less than the cost of renting clubs. Let r represent the number of rounds of golf.

25. For what values of x is the area of the rectangle shown greater than 100 square units?



26. For what values of x is the perimeter of the rectangle shown greater than 50 units?